IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended): A method for the continuous vacuum cleaning of a substrate ~~, wherein~~ comprising:

~~- a species is chosen that has a low sputtering efficiency and is chemically active with regard to the soiling matter;~~

- ~~using at least one linear ion source, a plasma is generated~~ generating a plasma from a gas mixture comprising predominantly oxygen but substantially no argon using at least one linear ion source, wherein the linear ion source generates a collimated beam of ions ~~the species having a low sputtering efficiency~~; and

- subjecting at least one surface portion of ~~said~~ a substrate optionally associated with a layer ~~is subjected~~ to said plasma ~~so that said ionized species~~ to at least partly eliminate[[s]], by chemical reaction, the soiling matter possibly adsorbed or located on said surface portion without removing material from the surface portion of the substrate.

2. (Currently Amended): The cleaning method as claimed in claim 1, ~~wherein it is followed, without breaking vacuum, by at least one phase of~~ further comprising depositing at least one thin film on said surface portion of said substrate without breaking vacuum, this deposition phase being carried out by a vacuum deposition process.

3. (Previously Presented): The method as claimed in claim 2, wherein the deposition process consists of a cathode sputtering process.

4. (Previously Presented): The method as claimed in claim 2, wherein the vacuum

deposition process consists of a process based on CVD.

5. (Currently Amended): The method as claimed in claim 1, ~~wherein a step of~~ further comprising causing relative movement between the ion source and the substrate ~~is carried out~~.

6. (Previously Presented): The method as claimed in claim 1, wherein the linear ion source is positioned with respect to the surface portion of the substrate in such a way that the average sputtering efficiency of the ionized species does not allow sputtering of said surface portion.

7. (Previously Presented): The method as claimed in claim 1, wherein the linear ion source is positioned within a plant of industrial size.

8. (Previously Presented): The method as claimed in claim 1, wherein the linear ion source generates a collimated beam of ions with an energy between 0.5 and 2.5 keV.

9. (Previously Presented): The method as claimed in claim 1, wherein it is carried out within at least one chamber intended for depositing thin films by vacuum sputtering, in a pumping chamber, or instead of a cathode, or in an intermediate chamber located between the latter items, or else within an airlock for introducing the substrates.

10. (Previously Presented): The method as claimed in claim 1, wherein two different surface portions of a substrate are cleaned simultaneously or successively, using at least said linear ion source.

11. (Withdrawn): A substrate obtained by implementing the method as claimed in claim 1, wherein the substrate is provided with a multilayer coating having a high reflection for thermal radiation, the coating of which consists of at least one sequence of at least five successive layers, namely of the following:

- a first layer based on metal oxide or semiconductor;
- a layer of a metal oxide or semiconductor deposited on the first layer;
- a silver layer;
- a metal layer deposited on the silver layer; and
- an upper layer comprising a metal oxide or semiconductor, deposited on this metal layer.

12. (Withdrawn): The substrate obtained by implementing the method as claimed in claim 1, wherein the substrate is provided with a thin-film multilayer comprising an alternation of n functional layers A having reflection properties in the infrared and/or in solar radiation, and of (n+1) coatings B where n.gtoreq.1, said coatings B comprising a layer or superposition of layers of a dielectric, or on a mixture of silicon and aluminum, or on silicon oxynitride, or on zinc oxide, so that each functional layer A is placed between two coatings B, the multilayer also including layers C that adsorb in the visible, these layers being optionally nitrided and located above and/or below the functional layer.

13. (Withdrawn): The substrate obtained by implementing the method as claimed in claim 1, wherein the substrate is provided with a thin-film multilayer comprising an alternation of one or more n functional layers having reflection properties in the infrared and/or in solar radiation, and of (n+1) coatings, where $n \geq 1$, said multilayer being composed,

on the one hand, of one or more layers, including at least one layer made of a dielectric, and, on the other hand, of at least one functional layer made of silver or of a metal alloy containing silver, the (each) functional layer being placed between two dielectric layers.

14. (Withdrawn): The substrate obtained by implementing the method as claimed in claim 1, wherein it comprises a thin-film multilayer comprising at least one sequence of at least five successive layers of the following:

- a first layer;
- a dielectric layer deposited on the first layer;
- a functional layer having reflection properties in the infrared and/or in solar radiation;
- a metal layer on the silver layer; and
- an upper layer based on silicon nitride, deposited on this metal layer.

15. (Withdrawn): The substrate obtained by implementing the method as claimed in claim 1, provided with a thin-film multilayer that acts on solar radiation, wherein said multilayer comprises at least one functional layer based on a partially or fully nitrided metal, said metal belonging to the group consisting of niobium, tantalum and zirconium, said functional layer being surmounted by at least one overlayer based on aluminum nitride or oxynitride, silicon nitride or oxynitride, or a mixture of at least two of these compounds, said multilayer also including, between said substrate and said functional layer, at least one underlayer made of a transparent dielectric.

16. (Withdrawn): The substrate obtained by implementing the method as claimed in claim 1, which comprises, on at least one of its sides, an antireflection coating made of a thin-

film multilayer made of dielectrics having alternately high and low refractive indices, wherein the high-index first layer and/or the high-index third layer are based on one or more metal oxides selected from the group consisting of zinc oxide, tin oxide and zirconium oxide, or based on one or more nitrides chosen from silicon nitride and/or aluminum nitride, or based on tin/zinc/antimony mixed oxides or based on silicon/titanium or titanium/zinc mixed oxides, or based on mixed nitrides selected from the group consisting of silicon nitride and zirconium nitride, and the low-index second layer and/or the low-index fourth layer are based on silicon oxide, silicon oxynitride and/or silicon oxycarbide or on a silicon aluminum mixed oxide.

17. (Withdrawn): The substrate obtained by implementing the method as claimed in claim 1, wherein the substrate comprises, on at least one of its sides, an electrochemical device.

18. (Withdrawn): The substrate as claimed in claim 11, for the automobile industry, or single or double glazing for buildings, glazing for protecting objects of the painting type, an antidazzle computer screen, or glass furniture.

19. (Withdrawn): The substrate as claimed in claim 18, wherein the substrate is curved.

20. (Previously Presented): The cleaning method as claimed in claim 1, wherein the at least one linear ion source is based on oxygen.

21. (Currently Amended): The cleaning method as claimed in claim ~~[[1]]~~ 3, wherein

the cathode sputtering process is magnetically enhanced sputtering.

22. (Previously Presented): The cleaning method as claimed in claim 1, wherein the linear ion source generates a collimated beam of ions with an energy between 1 and 2 keV.

23. (Previously Presented): The cleaning method as claimed in claim 1, wherein the linear ion source generates a collimated beam of ions with an energy at about 1.5 keV.

24. (Withdrawn): The substrate according to claim 11, wherein the first layer is selected from the group consisting of tin oxide, titanium oxide and zinc oxide; the second layer is based on zinc oxide, the metal layer is selected from the group consisting of nickel chromium, titanium, niobium and zirconium; and the upper layer is selected from the group consisting of tin oxide, zinc oxide and titanium oxide.

25. (Withdrawn): The substrate according to claim 12, wherein the thin-film multilayer is based on silver; the coatings B are based on silicon nitride, or on a mixture of silicon and aluminum, or on silicon oxynitride, or on zinc oxide; and the layers C are based on titanium, on nickel chromium or on zirconium.

26. (Withdrawn): The substrate according to claim 13, wherein the thin-film multilayer is of metallic nature, and the at least one layer made of a dielectric is based on tin oxide or nickel chromium oxide.

27. (Withdrawn): The substrate according to claim 14, wherein the first layer is based on silicon nitride; the dielectric layer is based on nickel chromium or on titanium; the

functional layer is based on silver; and the metal layer is selected from the group consisting of nickel chromium, titanium, niobium and zirconium.

28. (Withdrawn): The substrate according to claim 15, wherein the at least one underlayer is selected from the group consisting of silicon and/or aluminum nitride, silicon and/or aluminum oxynitride and silicon oxide.

29. (Withdrawn): The substrate according to claim 17, wherein the electrochemical device is an electrically controllable system of the glazing type and having variable optical and/or energy properties, of a photovoltaic device or within an electroluminescent device.